

Technical Data Sheet

**Qr Resin QR-1018IM-FR**

Polycarbonate
LyondellBasell Industries
Engineering Plastics

Product Description

Available with UV (V) or Release (R).
Flame Packages Available (0.0625 in min. thickness): 94V-2, 94V-0, 94-5VA

General

Material Status	• Commercial: Active
Availability	• North America
Features	• High Impact Resistance • Low Temperature Impact Resistance
Appearance	• Colors Available • Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.21	1.21 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	18 g/10 min	18 g/10 min	ASTM D1238

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	9000 psi	62.1 MPa	ASTM D638
Flexural Modulus	324000 psi	2230 MPa	ASTM D790
Flexural Strength (Yield)	13000 psi	89.6 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
-20°F (-29°C)	8.0 ft·lb/in	430 J/m	
73°F (23°C)	12 ft·lb/in	640 J/m	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	280 °F	138 °C	
264 psi (1.8 MPa), Unannealed	270 °F	132 °C	

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	250 °F	121 °C
Drying Time	3.0 to 6.0 hr	3.0 to 6.0 hr
Drying Time, Maximum	6.0 hr	6.0 hr
Rear Temperature	500 to 540 °F	260 to 282 °C
Middle Temperature	520 to 560 °F	271 to 293 °C
Front Temperature	540 to 580 °F	282 to 304 °C
Nozzle Temperature	530 to 570 °F	277 to 299 °C
Processing (Melt) Temp	540 to 570 °F	282 to 299 °C
Mold Temperature	160 to 200 °F	71 to 93 °C

Notes

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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